

BRIEF NOTE ON LIVE STORAGE STATUS OF 91 RESERVOIRS IN THE COUNTRY (WITH REFERENCE TO RESERVOIR STORAGE BULLETIN OF 13.06.2019)

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 **13.06.2019**, live storage available in these reservoirs is **29.189 BCM**, which is **18%** of total live storage capacity of these reservoirs. However, last year the live storage available in these reservoirs for the corresponding period was **28.013 BCM** and the average of last 10 years live storage was **28.972 BCM**. Thus, the live storage available in 91 reservoirs **as per 13.06.2019 Bulletin** is **104%** of the live storage of corresponding period of last year and **101%** of storage of average of last ten years.

The overall storage position is **more than the** corresponding period of last year in the country as a whole and is also **more 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 **13.06.2019**, the total live storage available in these reservoirs is **7.12 BCM** which is **40%** of total live storage capacity of these reservoirs. The storage during corresponding period of last year was **16%** and average storage of last ten years during corresponding period was **26%** 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 **13.06.2019**, the total live storage available in these reservoirs is **3.42 BCM** which is **18%** of total live storage capacity of these reservoirs. The storage during corresponding period of last year was **21%** and average storage of last ten years during corresponding period was **17%** of live storage capacity of these reservoirs. Thus, storage during current year is less than the corresponding period of last year but is 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 **13.06.2019**, the total live storage available in these reservoirs is **3.11 BCM** which is **10%** of total live storage capacity of these reservoirs. The storage during corresponding period of last year was **13%** and average storage of last ten years during corresponding period was **17%** 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 **13.06.2019**, the total live storage available in these reservoirs is **10.06 BCM** which is **24%** of total live storage capacity of these reservoirs. The storage during corresponding period of last year was **22%** and average storage of last ten years during corresponding period was **19%** 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 **13.06.2019**, the total live storage available in these reservoirs is **5.48 BCM** which is **11%** of total live storage capacity of these reservoirs. The storage during corresponding period of last year was **15%** and average storage of last ten years during corresponding period was **15%** 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, and Narmada Close to Normal in Mahi, Rivers of Kutch, Mahanadi & Neighbouring East Flowing Rivers and West Flowing Rivers of South. Deficient in Sabarmati, Godavari, Krishna and Cauvery & neighbouring EFRs and Highly Deficient in Tapi.
- Table on page 5-7 of the bulletin. The numbers of reservoirs having storage more than last year are **23** and reservoirs having storage more than average of last ten years are **30**. The numbers of reservoirs having storage less than 20% with respect to last year is **13** and having storage less than 20% with reference to average of last ten years is **19**. The number of reservoirs having storage less than or equal to 50% with respect to last year are **32** and having storage less than or equal to 50% with reference to average of last ten years are **32**.

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 13.06.2019

- 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 **13.06.2019** is **29.189** BCM (**18** percent of the live storage capacity at FRL).The current year's storage is nearly **104** percent of last year's storage and **101** 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.)	-	-	-	-	-	1	1	4	H.P.	77 %
									PUNJAB	29 %
									RAJASTHAN	-5 %
EAST (Jharkhand, Odisha, Tripura & W. Bengal (15 Resv.)	-	-	-	-	-	1	-	14	JHARKHAND	-16 %
									ODISHA	9 %
									W. BENGAL	29 %
									TRIPURA	15 %
WEST (Guj.& Mah.), (27 Resv.)	-	-	-	-	-	-	-	27	GUJARAT	-22 %
									MAH.	-68 %
CENTRAL (MP, UP, Uttarakhand & Chh.), (12 Resv)	-	-	-	-	1	-	1	10	U.P.	-11 %
									UTTARAKHAND	37 %
									M.P.	39 %
									CHHATISGARH	-9 %
SOUTH (Karnataka, TN, AP&TG, AP, TG, & Kerala), (31 Resv.)	-	-	1	-	-	-	-	30	AP&TG	-51 %
									A,P	-83 %
									TG	-34 %
									KARNATAKA	-8 %
									KERALA	-24 %
									T.N.	-41 %
Status of 91 reservoirs	0	0	1	0	1	2	2	85		

4 Basin wise storage position:

Better than normal: Ganga, Indus and Narmada.

Close to normal: Mahi, Rivers of Kutch, Mahanadi & Neighbouring East Flowing Rivers and West Flowing Rivers of South .

Deficient: Sabarmati, Godavari, Krishna and Cauvery & neighbouring EFRs .

Highly deficient: Tapi

- 5 Out of 91 reservoirs, **39** reservoirs reported more than 80% of normal storage & **52** reservoirs reported 80% or below of normal storage. Out of these **52** reservoirs **32** having storage upto 50% of normal storage.

Name of reservoir	%	Name of reservoir	%
YELDARI	0	SOMASILA	17
BHIMA(UJJANI)	0	UKAI	18
JAYAKWADI(PAITHON)	0	BHADAR	21
SHOLAYAR	0	MANIKDOH	22
UPPER TAPI	0	GHATAPRABHA	22
PENCH (TOTALADOH)	0	MATATILA	33
NAGARJUNA SAGAR	0	TAWA	36
ISAPUR	0	KOYANA	40
GANDHI SAGAR	2	UPPER VAITARNA	42
DHOM	3	DAMANAGANGA	44
TILAIYA	4	UPPER WARDHA	45
BARNA	4	KAKKI	46
DUDHGANGA	7	MALAMPUZHA	48
BHANDARDARA	9	PERIYAR	50
VANIVILAS SAGAR	12	KONAR	50
ALIYAR	12		
TUNGABHADRA	17		

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

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

19 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 OF 91 IMPORTANT RESERVOIRS OF INDIA

WEEK ENDING :- 13.06.2019

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>NORTHERN REGION</u>											
<u>HIMACHAL PRADESH</u>											
*1	GOBIND SAGAR(BHAKRA)	512.06	490.65	6.229	2.703	12-06-2019	43	9	25	676	1200
*2	PONG DAM	423.67	406.34	6.157	2.275	12-06-2019	37	9	21	-	360
<u>PUNJAB</u>											
*3	THEIN	527.91	513.78	2.344	1.360	13-06-2019	58	31	45	348	600
<u>RAJASTHAN</u>											
*4	MAHI BAJAJ SAGAR	280.75	267.85	1.711	0.442	12-06-2019	26	31	21	63	140
5	JHAKAM	359.50	345.05	0.132	0.030	12-06-2019	23	28	17	28	-
*6	RANA PRATAP SAGAR	352.81	346.08	1.436	0.306	13-06-2019	21	31	30	229	172
<u>EASTERN REGION</u>											
<u>JHARKHAND</u>											
7	TENUGHAT	269.14	256.47	0.821	0.295	13-06-2019	36	34	33	-	-
8	MAITHON	146.3	136.99	0.471	0.073	13-06-2019	15	25	23	342	-
*9	PANCHET HILL	124.97	121.36	0.184	0.044	13-06-2019	24	44	38	\$	80
10	KONAR	425.81	414.71	0.176	0.027	13-06-2019	15	18	31	\$	-
11	TILAIYA	368.81	363.40	0.142	0.001	13-06-2019	1	6	17	\$	4
<u>ODISHA</u>											
*12	HIRAKUD	192.02	183.51	5.378	0.884	12-06-2019	16	20	15	153	307
*13	BALIMELA	462.08	445.59	2.676	0.515	13-06-2019	19	8	18	-	360
14	SALANADI	82.30	73.64	0.558	0.301	13-06-2019	54	43	24	42	-
*15	RENGALI	123.50	110.96	3.432	0.193	13-06-2019	6	16	9	3	200
*16	MACHKUND(JALPUT)	838.16	827.88	0.893	0.252	13-06-2019	28	15	25	-	115
*17	UPPER KOLAB	858.00	846.87	0.935	0.124	13-06-2019	13	13	14	89	320
*18	UPPER INDRAVATI	642.00	628.52	1.456	0.235	13-06-2019	16	12	15	128	600
<u>WEST BENGAL</u>											
19	MAYURAKSHI	121.31	109.79	0.480	0.076	13-06-2019	16	35	21	227	-
20	KANGSABATI	134.14	125.67	0.914	0.303	13-06-2019	33	46	21	341	-
<u>TRIPURA</u>											
21	GUMTI	93.55	88.25	0.312	0.099	11-06-2019	32	75	28	-	15
<u>WESTERN REGION</u>											
<u>GUJARAT</u>											
*22	UKAI	105.16	84.39	6.615	0.233	13-06-2019	4	10	20	348	300
23	SABARMATI(DHAROI)	189.59	178.91	0.735	0.062	12-06-2019	8	13	14	95	1
*24	KADANA	127.7	119.33	1.472	0.481	12-06-2019	33	39	43	200	120
25	SHETRUNJI	55.53	47.77	0.300	0.020	12-06-2019	7	13	8	36	-
26	BHADAR	107.89	98.68	0.188	0.003	12-06-2019	2	13	7	27	-
27	DAMANAGANGA	79.86	63.90	0.502	0.023	13-06-2019	5	18	10	51	1
28	DANTIWADA	184.1	166.71	0.399	0.019	12-06-2019	5	16	3	45	-
29	PANAM	127.41	121.55	0.697	0.239	12-06-2019	34	35	35	36	2
*30	SARDAR SAROVAR	138.68	119.95	5.760	1.211	13-06-2019	21	0	10	2120	1450
31	KARJAN	115.25	98.38	0.523	0.155	13-06-2019	30	34	29	51	3

WEEKLY REPORT OF 91 IMPORTANT RESERVOIRS OF INDIA

WEEK ENDING :- 13.06.2019

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>MAHARASHTRA</u>											
32	JAYAKWADI(PAITHON)	463.91	454.26	2.171	0.000	13-06-2019	0	23	8	227	-
*33	KOYANA	657.90	620.37	2.652	0.214	13-06-2019	8	24	20	-	1920
34	BHIMA(UJJANI)	496.83	485.48	1.517	0.000	12-06-2019	0	0	3	125	12
35	ISAPUR	441.00	425.72	0.965	0.000	13-06-2019	0	0	16	104	-
36	MULA	552.30	534.93	0.609	0.017	13-06-2019	3	1	4	139	-
37	YELDARI	461.77	445.42	0.809	0.000	11-06-2019	0	0	8	78	-
38	GIRNA	398.07	384.13	0.524	0.043	13-06-2019	8	10	8	79	-
39	KHADAKVASLA	582.47	579.33	0.056	0.018	13-06-2019	32	25	29	78	8
*40	UPPER VAITARNA	603.50	590.85	0.331	0.037	13-06-2019	11	26	27	-	61
41	UPPER TAPI	214.00	206.48	0.255	0.000	13-06-2019	0	0	11	45	-
*42	PENCH (TOTALADOH)	490.00	460.55	1.091	0.000	13-06-2019	0	6	17	127	160
43	UPPER WARDHA	342.50	334.66	0.564	0.075	13-06-2019	13	35	30	70	-
44	BHATSA	142.07	106.48	0.942	0.245	13-06-2019	26	32	31	29.378	15
45	DHOM	747.70	725.65	0.331	0.002	13-06-2019	1	16	18	36.2	2
46	DUDHGANGA	646.00	609.54	0.664	0.009	13-06-2019	1	22	19	2.441	24
47	MANIKDOH (KUKADI)	711.25	683.49	0.288	0.002	13-06-2019	1	5	3	2.2	6
48	BHANDARDARA	744.91	700.68	0.304	0.003	13-06-2019	1	28	11	63.74	46
<u>CENTRAL REGION</u>											
<u>UTTAR PRADESH</u>											
49	MATATILA	308.46	300.87	0.707	0.053	12-06-2019	7	9	23	-	30
*50	RIHAND	268.22	255.51	5.649	0.705	13-06-2019	12	11	12	-	300
<u>UTTRAKHAND</u>											
*51	RAMGANGA	365.30	340.66	2.196	0.739	13-06-2019	34	8	25	1897	198
*52	TEHRI	830.00	743.67	2.615	0.061	13-06-2019	2	1	2	2351	1000
<u>MADHYA PRADESH</u>											
*53	GANDHI SAGAR	399.90	381.22	6.827	0.030	13-06-2019	0	17	18	220	115
54	TAWA	355.40	337.35	1.944	0.133	13-06-2019	7	9	19	247	-
*55	BARGI	422.76	413.10	3.180	1.071	13-06-2019	34	41	18	157	90
*56	BANSAGAR	341.64	337.59	5.166	3.419	13-06-2019	66	42	35	488	425
*57	INDIRA SAGAR	262.13	250.80	9.745	2.333	13-06-2019	24	17	10	2380	1000
58	BARNA	348.55	338.15	0.456	0.003	13-06-2019	1	4	15	546	-
<u>CHHATTIS GARH</u>											
*59	MINIMATA BANGOI	359.66	349.51	3.046	1.391	11-06-2019	46	51	49	-	120
60	MAHANADI	348.70	339.30	0.767	0.120	12-06-2019	16	27	22	319	10
<u>SOUTHERN REGION</u>											
<u>A.P & TG</u>											
*61	SRISAILAM	269.75	245.91	8.288	0.823	13-06-2019	10	9	9	0	770
*62	NAGARJUNA SAGAR	179.83	154.96	6.841	0.000	13-06-2019	0	1	13	895	810
<u>ANDHRA PRADESH</u>											
63	SOMASILA	100.58	78.00	1.994	0.087	13-06-2019	4	17	25	168	0
<u>TELANGANA</u>											
64	SRIRAMSAGAR	332.54	319.77	2.300	0.162	13-06-2019	7	10	12	411	27
65	LOWER MANAIR	280.42	269.11	0.621	0.107	13-06-2019	17	16	22	199	60

WEEKLY REPORT OF 91 IMPORTANT RESERVOIRS OF INDIA

WEEK ENDING :- 13.06.2019

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	738.94	1.163	0.185	13-06-2019	16	23	9	79	-
*67	TUNGABHADRA	497.74	479.97	3.276	0.064	13-06-2019	2	5	12	529	72
68	GHATAPRABHA	662.95	630.16	1.391	0.013	12-06-2019	1	9	4	317	-
69	BHADRA	657.76	639.12	1.785	0.265	12-06-2019	15	10	19	106	39
70	LINGANAMAKKI	554.43	532.68	4.294	0.464	13-06-2019	11	18	13	-	55
71	NARAYANPUR	492.25	487.23	0.863	0.225	13-06-2019	26	44	32	425	-
72	MALAPRABHA(RENUKA)	633.83	620.60	0.972	0.030	12-06-2019	3	5	5	215	-
73	KABINI(Sancherla Tank)	696.16	687.66	0.444	0.059	13-06-2019	13	60	13	85	-
74	HEMAVATHY	890.63	872.90	0.927	0.097	13-06-2019	10	36	11	265	-
75	HARANGI	871.42	854.99	0.220	0.031	13-06-2019	14	29	17	53	-
76	SUPA	564.00	532.14	4.120	1.224	13-06-2019	30	34	22	-	-
77	VANIVILAS SAGAR	652.28	631.76	0.802	0.011	13-06-2019	1	1	11	123	-
*78	ALMATTI	519.60	508.17	3.105	0.278	13-06-2019	9	9	7	@	290
*79	GERUSOPPA	55.00	51.06	0.130	0.107	12-06-2019	82	83	79	83	240
<u>KERALA</u>											
80	KALLADA(PARAPPAR)	115.82	99.26	0.507	0.183	13-06-2019	36	66	28	62	-
*81	IDAMALAYAR	169.00	124.61	1.018	0.082	13-06-2019	8	20	15	33	75
*82	IDUKKI	732.43	703.81	1.460	0.234	13-06-2019	16	35	20	-	780
*83	KAKKI	981.46	934.28	0.447	0.044	13-06-2019	10	39	21	23	300
*84	PERIYAR	867.41	859.78	0.173	0.022	13-06-2019	13	55	25	84	140
85	MALAPMUZHA	115.06	101.47	0.224	0.024	13-06-2019	11	30	22	21	3
<u>TAMIL NADU</u>											
86	LOWER BHAWANI	278.89	265.05	0.792	0.159	13-06-2019	20	34	21	105	8
*87	METTUR(STANLEY)	240.79	218.08	2.647	0.427	13-06-2019	16	13	30	122	360
88	VAIGAI	279.20	267.76	0.172	0.015	13-06-2019	9	13	12	61	6
89	PARAMBIKULAM	556.26	538.49	0.380	0.056	13-06-2019	15	14	24	101	-
90	ALIYAR	320.04	302.09	0.095	0.004	13-06-2019	4	2	35	#	60
*91	SHOLAYAR	1002.79	955.17	0.143	0.000	13-06-2019	0	56	16	-	95
TOTAL FOR 91 RESERVOIRS				161.993	29.189						
PERCENTAGE							18	17	18		

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.