

BRIEF NOTE ON LIVE STORAGE STATUS OF 91 RESERVOIRS IN THE COUNTRY (WITH REFERENCE TO RESERVOIR STORAGE BULLETIN OF 09.05.2019)

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 **09.05.2019**, live storage available in these reservoirs is **38.734 BCM**, which is **24%** of total live storage capacity of these reservoirs. However, last year the live storage available in these reservoirs for the corresponding period was **33.533 BCM** and the average of last 10 years live storage was **36.834 BCM**. Thus, the live storage available in 91 reservoirs **as per 09.05.2019 Bulletin** is **116%** 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 **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 **09.05.2019**, the total live storage available in these reservoirs is **8.80 BCM** which is **49%** of total live storage capacity of these reservoirs. The storage during corresponding period of last year was **18%** 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 **09.05.2019**, the total live storage available in these reservoirs is **5.87 BCM** which is **31%** of total live storage capacity of these reservoirs. The storage during corresponding period of last year was **33%** and average storage of last ten years during corresponding period was **28%** 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 **09.05.2019**, the total live storage available in these reservoirs is **4.74 BCM** which is **15%** 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 **24%** 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 **09.05.2019**, the total live storage available in these reservoirs is **11.95 BCM** which is **28%** of total live storage capacity of these reservoirs. The storage during corresponding period of last year was **26%** and average storage of last ten years during corresponding period was **25%** 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 **09.05.2019**, the total live storage available in these reservoirs is **7.38 BCM** which is **14%** 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 **16%** of live storage capacity of these reservoirs. Thus, storage during current year is better than the corresponding period of last year but is 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 Indus, Narmada and West Flowing Rivers of South Close to Normal in Ganga, Mahi, Godavari and Mahanadi & Neighbouring East Flowing Rivers. Deficient in Sabarmati, Rivers of Kutch, 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 **33** and reservoirs having storage more than average of last ten years are **33**. The numbers of reservoirs having storage less than 20% with respect to last year is **7** and having storage less than 20% with reference to average of last ten years is **12**. The number of reservoirs having storage less than or equal to 50% with respect to last year are **20** and having storage less than or equal to 50% with reference to average of last ten years are **22**.

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 09.05.2019

- 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 **09.05.2019** is **38.734** BCM (**24** percent of the live storage capacity at FRL).The current year's storage is nearly **116** percent of last year's storage and **105** 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	1	3	H.P.	113 %
									PUNJAB	91 %
									RAJASTHAN	-1 %
EAST (Jharkhand, Odisha, Tripura & W. Bengal (15 Resv.)	-	-	-	-	-	2	2	11	JHARKHAND	-3 %
									ODISHA	8 %
									W. BENGAL	36 %
									TRIPURA	102 %
WEST (Guj.& Mah.), (27 Resv.)	-	-	-	-	-	-	-	27	GUJARAT	-32 %
									MAH.	-45 %
CENTRAL (MP, UP, Uttarakhand & Chh.), (12 Resv)	-	-	-	-	1	-	2	9	U.P.	-25 %
									UTTARAKHAND	26 %
									M.P.	21 %
									CHHATISGARH	-8 %
SOUTH (Karnataka, TN, AP&TG, AP, TG, & Kerala), (31 Resv.)	-	-	1	-	-	-	1	29	AP&TG	-47 %
									A,P	-85 %
									TG	-28 %
									KARNATAKA	16 %
									KERALA	7 %
									T.N.	-21 %
Status of 91 reservoirs	0	0	1	1	1	3	6	79		

4 Basin wise storage position:

Better than normal: Indus, Narmada, and West Flowing Rivers of South.

Close to normal: Ganga, Mahi, Godavari and Mahanadi & Neighbouring East Flowing Rivers .

Deficient: Sabarmati, Rivers of Kutch, Krishna and Cauvery & neighbouring EFRs .

Highly deficient: Tapi

- 5 Out of 91 reservoirs, **50** reservoirs reported more than 80% of normal storage & **41** reservoirs reported 80% or below of normal storage. Out of these **41** reservoirs **22** having storage upto 50% of normal storage.

Name of reservoir	%	Name of reservoir	%
YELDARI	0	DHOM	37
BHIMA(UJJANI)	0	TAWA	37
JAYAKWADI(PAITHON)	0	DAMANAGANGA	38
SHOLAYAR	0	ISAPUR	47
GANDHI SAGAR	2	TUNGABHADRA	49
BARNA	4		
PENCH (TOTALADOH)	4		
UPPER TAPI	5		
NAGARJUNA SAGAR	6		
VANIVILAS SAGAR	13		
SOMASILA	15		
ALIYAR	15		
BHANDARDARA	26		
TILAIYA	26		
BHADAR	26		
UKAI	27		
MULA	29		

19 reservoirs having storage 51% to 80% of normal storage.		
51% to 60%	61% to 70%	71% to 80%
4	6	9

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

20 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 :- 09.05.2019

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	7.037	25.05%	6.914	24.61%	7.095	25.25%	-0.82
INDUS	14.730	7.962	54.05%	2.099	14.25%	3.834	26.03%	107.67
NARMADA	21.608	6.036	27.93%	4.340	20.09%	4.171	19.30%	44.71
TAPI	7.394	0.606	8.20%	1.282	17.34%	2.069	27.98%	-70.71
MAHI	4.012	1.326	33.05%	1.539	38.36%	1.468	36.59%	-9.67
SABARMATI	0.735	0.082	11.16%	0.119	16.19%	0.131	17.82%	-37.40
RIVERS OF KUTCH	0.887	0.060	6.76%	0.166	18.71%	0.086	9.70%	-30.23
GODAVARI	15.394	2.753	17.88%	2.991	19.43%	3.299	21.43%	-16.55
KRISHNA	32.831	3.266	9.95%	3.449	10.51%	4.449	13.55%	-26.59
MAHANADI & NEIGHBOURING EFRS	13.181	4.264	32.35%	5.369	40.73%	4.602	34.91%	-7.34
CAUVERY & NEIGHBOURING EFRS	8.359	1.253	14.99%	1.050	12.56%	1.867	22.34%	-32.89
WEST FLOWING RIVERS OF SOUTH	14.766	4.089	27.69%	4.215	28.55%	3.763	25.48%	8.66
TOTAL	161.993	38.734		33.533		36.834		
PERCENTAGE								5.16

WEEKLY REPORT OF 91 IMPORTANT RESERVOIRS OF INDIA

GOVERNMENT OF INDIA

CENTRAL WATER COMMISSION

WEEK ENDING :- 09.05.2019

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	494.28	6.229	3.407	09-05-2019	55	13	22	676	1200
*2	PONG DAM	423.67	408.54	6.157	2.755	09-05-2019	45	11	24	-	360
<u>PUNJAB</u>											
*3	THEIN	527.91	520.84	2.344	1.800	09-05-2019	77	26	40	348	600
<u>RAJASTHAN</u>											
*4	MAHI BAJAJ SAGAR	280.75	268.15	1.711	0.459	08-05-2019	27	33	25	63	140
5	JHAKAM	359.50	345.20	0.132	0.031	06-05-2019	23	30	20	28	-
*6	RANA PRATAP SAGAR	352.81	346.38	1.436	0.350	09-05-2019	24	34	28	229	172
<u>EASTERN REGION</u>											
<u>JHARKHAND</u>											
7	TENUGHAT	269.14	257.30	0.821	0.319	09-05-2019	39	41	35	-	-
8	MAITHON	146.3	138.18	0.471	0.101	09-05-2019	21	37	29	342	-
*9	PANCHET HILL	124.97	122.96	0.184	0.095	09-05-2019	52	24	40	\$	80
10	KONAR	425.81	417.91	0.176	0.057	09-05-2019	32	23	41	\$	-
11	TILAIYA	368.81	363.86	0.142	0.007	09-05-2019	5	9	19	\$	4
<u>ODISHA</u>											
*12	HIRAKUD	192.02	185.67	5.378	1.578	09-05-2019	29	31	28	153	307
*13	BALIMELA	462.08	451.62	2.676	1.132	02-05-2019	42	10	22	-	360
14	SALANADI	82.30	73.89	0.558	0.307	08-05-2019	55	41	25	42	-
*15	RENGALI	123.50	113.86	3.432	0.730	02-05-2019	21	48	34	3	200
*16	MACHKUND(JALPUT)	838.16	830.56	0.893	0.369	02-05-2019	41	40	37	-	115
*17	UPPER KOLAB	858.00	849.48	0.935	0.251	02-05-2019	27	27	28	89	320
*18	UPPER INDRAVATI	642.00	631.28	1.456	0.440	02-05-2019	30	29	31	128	600
<u>WEST BENGAL</u>											
19	MAYURAKSHI	121.31	109.93	0.480	0.078	09-05-2019	16	36	19	227	-
20	KANGSABATI	134.14	125.73	0.914	0.306	08-05-2019	33	46	21	341	-
<u>TRIPURA</u>											
21	GUMTI	93.55	88.20	0.312	0.097	08-05-2019	31	54	15	-	15
<u>WESTERN REGION</u>											
<u>GUJARAT</u>											
*22	UKAI	105.16	86.53	6.615	0.509	09-05-2019	8	18	29	348	300
23	SABARMATI(DHAROI)	189.59	179.61	0.735	0.082	06-05-2019	11	16	18	95	1
*24	KADANA	127.7	120.65	1.472	0.573	08-05-2019	39	45	51	200	120
25	SHETRUNJI	55.53	48.47	0.300	0.028	06-05-2019	9	15	12	36	-
26	BHADAR	107.89	99.97	0.188	0.009	06-05-2019	5	19	18	27	-
27	DAMANAGANGA	79.86	66.25	0.502	0.054	09-05-2019	11	31	28	51	1
28	DANTIWADA	184.1	167.23	0.399	0.023	08-05-2019	6	21	4	45	-
29	PANAM	127.41	122.15	0.697	0.263	08-05-2019	38	37	39	36	2
*30	SARDAR SAROVAR	138.68	119.52	5.760	1.149	09-05-2019	20	0	13	2120	1450
31	KARJAN	115.25	101.88	0.523	0.210	09-05-2019	40	46	41	51	3

WEEKLY REPORT OF 91 IMPORTANT RESERVOIRS OF INDIA

GOVERNMENT OF INDIA

CENTRAL WATER COMMISSION

WEEK ENDING :- 09.05.2019

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
MAHARASHTRA											
32	JAYAKWADI(PAITHON)	463.91	454.81	2.171	0.000	09-05-2019	0	36	14	227	-
*33	KOYANA	657.90	635.61	2.652	0.843	08-05-2019	32	40	35	-	1920
34	BHIMA(UJJANI)	496.83	487.82	1.517	0.000	09-05-2019	0	14	9	125	12
35	ISAPUR	441.00	428.51	0.965	0.098	09-05-2019	10	0	22	104	-
36	MULA	552.30	535.92	0.609	0.035	09-05-2019	6	27	20	139	-
37	YELDARI	461.77	445.75	0.809	0.000	09-05-2019	0	0	10	78	-
38	GIRNA	398.07	386.30	0.524	0.093	09-05-2019	18	17	14	79	-
39	KHADAKVASLA	582.47	579.00	0.056	0.015	09-05-2019	27	84	50	78	8
*40	UPPER VAITARNA	603.50	595.06	0.331	0.093	09-05-2019	28	28	37	-	61
41	UPPER TAPI	214.00	207.85	0.255	0.004	09-05-2019	2	9	32	45	-
*42	PENCH (TOTALADOH)	490.00	464.76	1.091	0.009	09-05-2019	1	11	23	127	160
43	UPPER WARDHA	342.50	335.22	0.564	0.097	09-05-2019	17	38	34	70	-
44	BHATSA	142.07	112.58	0.942	0.329	09-05-2019	35	41	40	29.378	15
45	DHOM	747.70	729.57	0.331	0.034	09-05-2019	10	29	28	36.2	2
46	DUDHGANGA	646.00	625.38	0.664	0.156	25-04-2019	23	39	35	2.441	24
47	MANIKDOH (KUKADI)	711.25	685.32	0.288	0.008	09-05-2019	3	9	4	2.2	6
48	BHANDARDARA	744.91	711.11	0.304	0.022	09-05-2019	7	37	28	63.74	46
CENTRAL REGION											
UTTAR PRADESH											
49	MATATILA	308.46	303.40	0.707	0.186	08-05-2019	26	14	40	-	30
*50	RIHAND	268.22	255.70	5.649	0.758	09-05-2019	13	15	17	-	300
UTTRAKHAND											
*51	RAMGANGA	365.30	344.22	2.196	0.891	09-05-2019	41	19	34	1897	198
*52	TEHRI	830.00	757.51	2.615	0.343	09-05-2019	13	6	9	2351	1000
MADHYA PRADESH											
*53	GANDHI SAGAR	399.90	381.22	6.827	0.030	08-05-2019	0	17	25	220	115
54	TAWA	355.40	337.66	1.944	0.148	09-05-2019	8	9	20	247	-
*55	BARGI	422.76	414.45	3.180	1.262	09-05-2019	40	53	29	157	90
*56	BANSAGAR	341.64	337.59	5.166	3.419	08-05-2019	66	45	36	488	425
*57	INDIRA SAGAR	262.13	252.90	9.745	3.264	08-05-2019	33	23	18	2380	1000
58	BARNA	348.55	338.15	0.456	0.003	08-05-2019	1	8	18	546	-
CHHATTIS GARH											
*59	MINIMATA BANGOI	359.66	350.64	3.046	1.530	09-05-2019	50	53	52	-	120
60	MAHANADI	348.70	339.29	0.767	0.119	08-05-2019	16	29	30	319	10
SOUTHERN REGION											
A.P & TG											
*61	SRISAILAM	269.75	246.25	8.288	0.840	09-05-2019	10	9	10	0	770
*62	NAGARJUNA SAGAR	179.83	155.78	6.841	0.053	09-05-2019	1	2	13	895	810
ANDHRA PRADESH											
63	SOMASILA	100.58	78.55	1.994	0.101	09-05-2019	5	18	34	168	0
TELANGANA											
64	SRIRAMSAGAR	332.54	320.13	2.300	0.180	09-05-2019	8	8	12	411	27
65	LOWER MANAIR	280.42	269.63	0.621	0.120	09-05-2019	19	17	23	199	60

WEEKLY REPORT OF 91 IMPORTANT RESERVOIRS OF INDIA

GOVERNMENT OF INDIA

CENTRAL WATER COMMISSION

WEEK ENDING :- 09.05.2019

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	739.66	1.163	0.216	09-05-2019	19	7	14	79	-
*67	TUNGABHADRA	497.74	480.83	3.276	0.090	09-05-2019	3	2	6	529	72
68	GHATAPRABHA	662.95	636.38	1.391	0.119	09-05-2019	9	9	7	317	-
69	BHADRA	657.76	641.35	1.785	0.379	09-05-2019	21	6	25	106	39
70	LINGANAMAKKI	554.43	537.50	4.294	0.892	09-05-2019	21	18	20	-	55
71	NARAYANPUR	492.25	487.26	0.863	0.227	09-05-2019	26	24	28	425	-
72	MALAPRABHA(RENUKA)	633.83	621.27	0.972	0.048	09-05-2019	5	6	6	215	-
73	KABINI(Sancherla Tank)	696.16	689.03	0.444	0.105	09-05-2019	24	10	9	85	-
74	HEMAVATHY	890.63	873.22	0.927	0.104	09-05-2019	11	10	8	265	-
75	HARANGI	871.42	855.09	0.220	0.031	09-05-2019	14	18	15	53	-
76	SUPA	564.00	536.00	4.120	1.479	09-05-2019	36	35	25	-	-
77	VANIVILAS SAGAR	652.28	631.89	0.802	0.012	09-05-2019	1	1	11	123	-
*78	ALMATTI	519.60	509.56	3.105	0.442	09-05-2019	14	10	7	@	290
*79	GERUSOPPA	55.00	51.95	0.130	0.112	03-05-2019	86	92	87	83	240
<u>KERALA</u>											
80	KALLADA(PARAPPAR)	115.82	102.90	0.507	0.231	09-05-2019	46	66	31	62	-
*81	IDAMALAYAR	169.00	132.60	1.018	0.185	09-05-2019	18	21	22	33	75
*82	IDUKKI	732.43	710.31	1.460	0.444	09-05-2019	30	29	25	-	780
*83	KAKKI	981.46	951.63	0.447	0.121	09-05-2019	27	39	30	23	300
*84	PERIYAR	867.41	859.83	0.173	0.023	09-05-2019	13	13	20	84	140
85	MALAPMUZHA	115.06	101.79	0.224	0.026	02-05-2019	12	14	19	21	3
<u>TAMIL NADU</u>											
86	LOWER BHAWANI	278.89	264.28	0.792	0.140	09-05-2019	18	17	17	105	8
*87	METTUR(STANLEY)	240.79	219.96	2.647	0.534	09-05-2019	20	10	27	122	360
88	VAIGAI	279.20	269.05	0.172	0.022	09-05-2019	13	9	12	61	6
89	PARAMBIKULAM	556.26	540.96	0.380	0.094	09-05-2019	25	5	25	101	-
90	ALIYAR	320.04	303.02	0.095	0.006	09-05-2019	6	0	41	#	60
*91	SHOLAYAR	1002.79	958.99	0.143	0.000	09-05-2019	0	0	4	-	95
TOTAL FOR 91 RESERVOIRS				161.993	38.734						
PERCENTAGE							24	21	23		

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.