

BRIEF NOTE ON LIVE STORAGE STATUS OF 91 RESERVOIRS IN THE COUNTRY (WITH REFERENCE TO RESERVOIR STORAGE BULLETIN OF 27.04.2017)

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 157.799 BCM which is about 62% of the live storage capacity of 253.388 BCM which is estimated to have been created in the country. As per reservoir storage bulletin dated **27.04.2017**, live storage available in these reservoirs is **42.658 BCM**, which is **27%** of total live storage capacity of these reservoirs. However, last year the live storage available in these reservoirs for the corresponding period was **34.178 BCM** and the average of last 10 years live storage was **41.141 BCM**. Thus, the live storage available in 91 reservoirs **as per 27.04.2017 Bulletin** is **125%** of the live storage of corresponding period of last year and **104%** 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 **27.04.2017**, the total live storage available in these reservoirs is **4.72 BCM** which is **26%** 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 **29%** 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.

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 **27.04.2017**, the total live storage available in these reservoirs is **8.21 BCM** which is **44%** of total live storage capacity of these reservoirs. The storage during corresponding period of last year was **30%** and average storage of last ten years during corresponding period was **29%** 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 27.07 BCM. As per Reservoir Storage Bulletin dated **27.04.2017**, the total live storage available in these reservoirs is **8.91 BCM** which is **33%** 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 **34%** of live storage capacity of these reservoirs. Thus, storage during current year is better than the storage of last year but is 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 **27.04.2017**, the total live storage available in these reservoirs is **15.87 BCM** which is **38%** of total live storage capacity of these reservoirs. The storage during corresponding period of last year was **28%** 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 (2 combined 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 **27.04.2017**, the total live storage available in these reservoirs is **4.95 BCM** which is **10%** of total live storage capacity of these reservoirs. The storage during corresponding period of last year was **14%** and average storage of last ten years during corresponding period was **21%** 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 Narmada, Mahi, Ganga, Sabarmati, Godavari, Tapi and Mahanadi & neighbouring East Flowing Rivers. Close to Normal in Indus and Deficient in West Flowing Rivers of South and Rivers of Kutch Basin and Highly Deficient in Cauvery & neighbouring EFR and Krishna basin.
- Table on page 5-7 of the bulletin. The numbers of reservoirs having storage more than last year are **54** and reservoirs having storage more than average of last ten years are **40**. The numbers of reservoirs having storage less than 20% with respect to last year is **5** and having storage less than 20% with reference to average of last ten years is **11**. The number of reservoirs having storage less than or equal to 50% with respect to last year are **14** and having storage less than or equal to 50% with reference to average of last ten years are **28**.

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 27.04.2017

- 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 27.04.2017 is 42.658 BCM (27 percent of the live storage capacity at FRL).The current year's storage is nearly 125 percent of last year's storage and 104 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	-	-	5	H.P.	-35 %
									PUNJAB	60 %
									RAJASTHAN	5 %
EAST (Jharkhand,Odisha, Tripura & W.Bengal (15 Resv.)	-	-	-	-	1	2	3	9	JHARKHAND	37 %
									ODISHA	48 %
									W. BENGAL	81 %
									TRIPURA	342 %
WEST (Guj.& Mah.), (27 Resv.)	-	-	-	1	1	1	3	21	GUJARAT	12 %
									MAH.	-19 %
CENTRAL (MP,UP,Uttarakhand & Chh.), (12 Resv)	-	-	-	-	-	2	2	8	U.P.	101 %
									UTTARAKHAND	-51 %
									M.P.	71 %
									CHHATISGARH	17 %
SOUTH (Karnataka,TN,AP&TG,AP, TG, & Kerala), (31 Resv.)	-	-	-	1	-	-	-	30	AP&TG	-79 %
									A,P	-69 %
									TG	32 %
									KARNATAKA	-43 %
									KERALA	-33 %
									T.N.	-81 %
Status of 91 reservoirs	0	0	0	2	3	5	8	73		

4 Basin wise storage position:

Better than normal: Ganga,Sabarmati,Godavari,Mahi, Narmada ,Tapi and Mahanadi & Neighbouring EFRS.

Close to normal: Indus

Deficient: Rivers of Kutch and West Flowing Rivers of South.

Highly deficient: Cauvery & neighbouring EFRS and Krishna.

- 5 Out of 91 reservoirs, 49 reservoirs reported more than 80% of normal storage & 42 reservoirs reported 80% or below of normal storage. Out of these 42 reservoirs 28 having storage upto 50% of normal storage.

Name of reservoir	%	Name of reservoir	%
SHOLAYAR	0	PERIYAR	22
NAGARJUNA SAGAR	0	BHADRA	22
ALMATTI	0	LOWER BHAWANI	31
BHIMA(UJJANI)	2	SOMASILA	31
KABINI	8	RAMGANGA	34
BHADAR	9	PENCH (TOTALADOH)	40
VAIGAI	10	SRISAILAM	41
PARAMBIKULAM	15	KRISHNARAJA SAGRA	41
METTUR(STANLEY)	15	HEMAVATHY	43
TUNGABHADRA	16	ALIYAR	46
VANIVILAS SAGAR	19	NARAYANPUR	46
DANTIWADA	21	LINGANAMAKKI	46

14 reservoirs having storage 51% to 80% of normal storage.		
51% to 60%	61% to 70%	71% to 80%
5	6	3

- 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 :- 27.04.2017

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	10.918	38.86%	7.874	28.03%	6.911	24.60%	57.98
INDUS	14.730	3.695	25.08%	3.003	20.39%	4.335	29.43%	-14.76
NARMADA	17.414	5.773	33.15%	4.661	26.77%	4.205	24.15%	37.29
TAPI	7.394	3.249	43.94%	2.011	27.20%	2.566	34.70%	26.62
MAHI	4.012	1.680	41.87%	0.890	22.18%	1.488	37.09%	12.90
SABARMATI	0.735	0.200	27.21%	0.186	25.31%	0.164	22.31%	21.95
RIVERS OF KUTCH	0.887	0.060	6.76%	0.258	29.09%	0.118	13.30%	-49.15
GODAVARI	15.394	4.343	28.21%	2.827	18.36%	3.735	24.26%	16.28
KRISHNA	32.831	1.904	5.80%	2.868	8.74%	6.017	18.33%	-68.36
MAHANADI & NEIGHBOURING EFRS	13.181	6.672	50.62%	4.022	30.51%	4.679	35.50%	42.59
CAUVERY & NEIGHBOURING EFRS	8.359	0.662	7.92%	1.695	20.28%	2.477	29.63%	-73.27
WEST FLOWING RIVERS OF SOUTH	14.766	3.502	23.72%	3.883	26.30%	4.446	30.11%	-21.23
TOTAL	157.799	42.658		34.178		41.141		
PERCENTAGE								3.69

WEEKLY REPORT OF 91 IMPORTANT RESERVOIRS OF INDIA

GOVERNMENT OF INDIA

CENTRAL WATER COMMISSION

WEEK ENDING :- 27.04.2017

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	470.42	6.229	1.185	27-04-2017	19	26	26	676	1200
*2	PONG DAM	423.67	396.66	6.157	1.033	27-04-2017	17	13	29	-	360
<u>PUNJAB</u>											
*3	THEIN	527.91	516.13	2.344	1.477	27-04-2017	63	24	39	348	600
<u>RAJASTHAN</u>											
*4	MAHI BAJAJ SAGAR	280.75	269.75	1.711	0.576	27-04-2017	34	21	24	63	140
5	JHAKAM	359.50	346.70	0.132	0.038	27-04-2017	29	8	17	28	-
*6	RANA PRATAP SAGAR	352.81	346.82	1.436	0.414	26-04-2017	29	32	38	229	172
<u>EASTERN REGION</u>											
<u>JHARKHAND</u>											
7	TENUGHAT	269.14	258.84	0.821	0.372	27-04-2017	45	35	34	-	-
8	MAITHON	146.3	143.05	0.471	0.277	27-04-2017	59	14	34	342	-
*9	PANCHET HILL	124.97	123.15	0.184	0.103	27-04-2017	56	8	36	\$	80
10	KONAR	425.81	416.97	0.176	0.048	27-04-2017	27	32	44	\$	-
11	TILAIYA	368.81	365.40	0.142	0.038	27-04-2017	27	18	20	\$	4
<u>ODISHA</u>											
*12	HIRAKUD	192.02	186.76	5.378	1.999	26-04-2017	37	33	34	153	307
*13	BALIMELA	462.08	450.89	2.676	1.045	26-04-2017	39	37	26	-	360
14	SALANADI	82.30	67.33	0.558	0.163	26-04-2017	29	4	23	42	-
*15	RENGALI	123.50	120.28	3.432	2.407	26-04-2017	70	27	27	3	200
*16	MACHKUND(JALPUT)	838.16	827.77	0.893	0.249	26-04-2017	28	43	44	-	115
*17	UPPER KOLAB	858.00	851.81	0.935	0.418	26-04-2017	45	30	28	89	320
*18	UPPER INDRAVATI	642.00	632.87	1.456	0.571	26-04-2017	39	34	27	128	600
<u>WEST BENGAL</u>											
19	MAYURAKSHI	121.31	111.29	0.480	0.105	27-04-2017	22	15	18	227	-
20	KANGSABATI	134.14	125.29	0.914	0.282	27-04-2017	31	20	14	341	-
<u>TRIPURA</u>											
21	GUMTI	93.55	89.40	0.312	0.137	27-04-2017	44	45	10	-	15
<u>WESTERN REGION</u>											
<u>GUJARAT</u>											
*22	UKAI	105.16	97.48	6.615	3.001	27-04-2017	45	30	36	348	300
23	SABARMATI(DHAROI)	189.59	182.60	0.735	0.200	27-04-2017	27	25	22	95	1
*24	KADANA	127.7	123.78	1.472	0.817	27-04-2017	56	26	52	200	120
25	SHETRUNJI	55.53	49.97	0.300	0.051	27-04-2017	17	14	14	36	-
26	BHADAR	107.89	99.24	0.188	0.005	27-04-2017	3	100	31	27	-
27	DAMANAGANGA	79.86	70.25	0.502	0.135	27-04-2017	27	23	40	51	1
28	DANTIWADA	184.1	163.28	0.399	0.004	27-04-2017	1	7	5	45	-
29	PANAM	127.41	121.80	0.697	0.249	27-04-2017	36	19	43	36	2
*30	SARDAR SAROVAR	121.92	118.27	1.566	0.971	27-04-2017	62	46	52	2120	1450
31	KARJAN	115.25	100.63	0.523	0.181	27-04-2017	35	23	52	51	3

WEEKLY REPORT OF 91 IMPORTANT RESERVOIRS OF INDIA

GOVERNMENT OF INDIA

CENTRAL WATER COMMISSION

WEEK ENDING :- 27.04.2017

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	459.10	2.171	0.673	26-04-2017	31	0	19	227	-
*33	KOYANA	657.90	632.79	2.652	0.553	26-04-2017	21	21	42	-	1920
34	BHIMA(UJJANI)	496.83	491.06	1.517	0.005	27-04-2017	0	0	17	125	12
35	ISAPUR	441.00	429.24	0.965	0.155	26-04-2017	16	10	32	104	-
36	MULA	552.30	541.67	0.609	0.173	27-04-2017	28	10	26	139	-
37	YELDARI	461.77	450.25	0.809	0.071	27-04-2017	9	0	15	78	-
38	GIRNA	398.07	389.27	0.524	0.174	26-04-2017	33	0	17	79	-
39	KHADAKVASLA	582.47	581.56	0.056	0.044	26-04-2017	79	48	38	78	8
*40	UPPER VAITARNA	603.50	596.83	0.331	0.137	26-04-2017	41	33	43	-	61
41	UPPER TAPI	214.00	210.33	0.255	0.074	26-04-2017	29	14	42	45	-
*42	PENCH (TOTALADOH)	490.00	471.05	1.091	0.118	25-04-2017	11	13	27	127	160
43	UPPER WARDHA	342.50	337.88	0.564	0.226	27-04-2017	40	26	34	70	-
44	BHATSA	142.07	119.34	0.942	0.437	26-04-2017	46	39	42	29.378	15
45	DHOM	747.70	735.42	0.331	0.103	26-04-2017	31	31	32	36.2	2
46	DUDHGANGA	646.00	628.90	0.664	0.217	26-04-2017	33	10	36	2.441	24
47	MANIKDOH (KUKADI)	711.25	687.60	0.288	0.019	26-04-2017	7	7	8	2.2	6
48	BHANDARDARA	744.91	729.81	0.304	0.116	26-04-2017	38	12	34	63.74	46
CENTRAL REGION											
UTTAR PRADESH											
49	MATATILA	308.46	304.43	0.707	0.256	26-04-2017	36	20	44	-	30
*50	RIHAND	268.22	260.18	5.649	2.312	27-04-2017	41	20	17	-	300
UTTRAKHAND											
*51	RAMGANGA	365.30	327.60	2.196	0.269	27-04-2017	12	14	36	1897	198
*52	TEHRI	830.00	754.35	2.615	0.276	27-04-2017	11	1	13	2351	1000
MADHYA PRADESH											
*53	GANDHI SAGAR	399.90	392.80	6.827	2.973	25-04-2017	44	44	22	220	115
54	TAWA	355.40	342.81	1.944	0.461	27-04-2017	24	11	23	247	-
*55	BARGI	422.76	413.35	3.180	1.091	27-04-2017	34	42	28	157	90
*56	BANSAGAR	341.64	336.58	5.166	3.056	25-04-2017	59	39	31	488	425
*57	INDIRA SAGAR	262.13	252.32	9.745	2.930	27-04-2017	30	23	18	2380	1000
58	BARNA	348.55	343.01	0.456	0.139	27-04-2017	30	7	17	546	-
CHHATTIS GARH											
*59	MINIMATA BANGOI	359.66	352.98	3.046	1.840	26-04-2017	60	37	50	-	120
60	MAHANADI	348.70	342.08	0.767	0.263	26-04-2017	34	28	37	319	10
SOUTHERN REGION											
A.P. & TG											
*61	SRISAILAM	269.75	239.27	8.288	0.534	27-04-2017	6	6	16	0	770
*62	NAGARJUNA SAGAR	179.83	154.53	6.841	0.000	27-04-2017	0	0	18	895	810
ANDHRA PRADESH											
63	SOMASILA	100.58	83.19	1.994	0.256	27-04-2017	13	39	41	168	0
TELANGANA											
64	SRIRAMSAGAR	332.54	322.88	2.300	0.364	27-04-2017	16	6	10	411	27
65	LOWER MANAIR	280.42	271.09	0.621	0.164	27-04-2017	26	12	26	199	60

WEEKLY REPORT OF 91 IMPORTANT RESERVOIRS OF INDIA

GOVERNMENT OF INDIA CENTRAL WATER COMMISSION

WEEK ENDING :- 27.04.2017

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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	736.69	1.163	0.102	26-04-2017	9	16	21	79	-
*67	TUNGABHADRA	497.74	479.21	3.276	0.046	27-04-2017	1	23	9	529	72
68	GHATAPRABHA	662.95	633.23	1.391	0.059	26-04-2017	4	4	8	317	-
69	BHADRA	657.76	636.25	1.785	0.145	26-04-2017	8	19	37	106	39
70	LINGANAMAKKI	554.43	533.37	4.294	0.513	27-04-2017	12	24	26	-	55
71	NARAYANPUR	492.25	485.64	0.863	0.125	27-04-2017	14	22	32	425	-
72	MALAPRABHA(RENUKA)	633.83	620.88	0.972	0.034	26-04-2017	3	2	7	215	-
73	KABINI(Sancherla Tank)	696.16	685.66	0.444	0.004	26-04-2017	1	5	11	85	-
74	HEMAVATHY	890.63	869.96	0.927	0.044	26-04-2017	5	11	11	265	-
75	HARANGI	871.42	855.48	0.220	0.034	25-04-2017	15	7	14	53	-
76	SUPA	564.00	534.63	4.120	1.385	27-04-2017	34	24	29	-	-
77	VANIVILAS SAGAR	652.28	632.48	0.802	0.020	26-04-2017	2	7	13	123	-
*78	ALMATTI	519.60	504.30	3.105	0.000	27-04-2017	0	5	8	@	290
*79	GERUSOPPA	55.00	48.84	0.130	0.096	27-04-2017	74	74	85	83	240
<u>KERALA</u>											
80	KALLADA(PARAPPAR)	115.82	90.80	0.507	0.086	27-04-2017	17	55	33	62	-
*81	IDAMALAYAR	169.00	137.75	1.018	0.267	27-04-2017	26	24	28	33	75
*82	IDUKKI	732.43	704.69	1.460	0.260	27-04-2017	18	26	30	-	780
*83	KAKKI	981.46	950.03	0.447	0.111	27-04-2017	25	39	36	23	300
*84	PERIYAR	867.41	859.01	0.173	0.010	27-04-2017	6	8	26	84	140
85	MALAPMUZHA	115.06	101.65	0.224	0.025	27-04-2017	11	10	22	21	3
<u>TAMIL NADU</u>											
86	LOWER BHAWANI	278.89	260.66	0.792	0.070	27-04-2017	9	4	28	105	8
*87	METTUR(STANLEY)	240.79	211.42	2.647	0.148	27-04-2017	6	21	37	122	360
88	VAIGAI	279.20	264.07	0.172	0.004	27-04-2017	2	8	23	61	6
89	PARAMBIKULAM	556.26	535.81	0.380	0.018	27-04-2017	5	12	32	101	-
90	ALIYAR	320.04	306.95	0.095	0.022	27-04-2017	23	15	51	#	60
*91	SHOLAYAR	1002.79	957.37	0.143	0.000	27-04-2017	0	0	4	-	95
TOTAL FOR 91 RESERVOIRS				157.799	42.658						
PERCENTAGE							27	22	26		

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.

Sl. No. 30th The FRL of S.S.P. 138.38 M and Live capacity at FRL will be 5.760 BCM. However at present the lowest block of the dam is at the level of 121.92 M. and the live capacity at this level is 1.566 BCM