

BRIEF NOTE ON LIVE STORAGE STATUS OF 91 RESERVOIRS IN THE COUNTRY (WITH REFERENCE TO RESERVOIR STORAGE BULLETIN OF 20.04.2017)

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 **20.04.2017**, live storage available in these reservoirs is **46.02 BCM**, which is **29%** of total live storage capacity of these reservoirs. However, last year the live storage available in these reservoirs for the corresponding period was **34.513 BCM** and the average of last 10 years live storage was **43.495 BCM**. Thus, the live storage available in 91 reservoirs **as per 20.04.2017 Bulletin** is **133%** of the live storage of corresponding period of last year and **106%** 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 **20.04.2017**, the total live storage available in these reservoirs is **4.50 BCM** which is **25%** 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 **30%** 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 **20.04.2017**, the total live storage available in these reservoirs is **8.68 BCM** which is **46%** of total live storage capacity of these reservoirs. The storage during corresponding period of last year was **32%** and average storage of last ten years during corresponding period was **32%** 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 **20.04.2017**, the total live storage available in these reservoirs is **9.81 BCM** which is **36%** of total live storage capacity of these reservoirs. The storage during corresponding period of last year was **19%** and average storage of last ten years during corresponding period was **35%** 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.

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 **20.04.2017**, the total live storage available in these reservoirs is **17.43 BCM** which is **41%** of total live storage capacity of these reservoirs. The storage during corresponding period of last year was **29%** 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 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 **20.04.2017**, the total live storage available in these reservoirs is **5.61 BCM** which is **11%** 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 **22%** 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 8, better than normal storage is available in Narmada, Mahi, Ganga, Sabarmati, Godavari, Tapi and Mahanadi & neighbouring East Flowing Rivers. NIL in Close to Normal and Deficient in Indus, West Flowing Rivers of South, Rivers of Kutch and Krishna Basin and Highly Deficient in Cauvery & neighbouring EFR basin.
- Table on page 5-7 of the bulletin. The numbers of reservoirs having storage more than last year are **59** and reservoirs having storage more than average of last ten years are **42**. The numbers of reservoirs having storage less than 20% with respect to last year is **4** and having storage less than 20% with reference to average of last ten years is **10**. The number of reservoirs having storage less than or equal to 50% with respect to last year are **12** 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 20.04.2017

- 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 **20.04.2017** is **46.020** BCM (**29** percent of the live storage capacity at FRL).The current year's storage is nearly **133** percent of last year's storage and **106** 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.)	-	-	-	-	-	1	-	5	H.P.	-41 %	
									PUNJAB	49 %	
									RAJASTHAN	10 %	
EAST (Jharkhand,Odisha, Tripura & W.Bengal (15 Resv.)	-	-	-	1	1	1	4	8	JHARKHAND	38 %	
									ODISHA	45 %	
									W. BENGAL	62 %	
									TRIPURA	238 %	
WEST (Guj.& Mah.), (27 Resv.)	-	1	-	-	1	1	5	19	GUJARAT	16 %	
									MAH.	-13 %	
CENTRAL (MP,UP,Uttarakhand & Chh.), (12 Resv)	-	-	-	-	1	2	2	7	U.P.	96 %	
									UTTARAKHAND	-42 %	
									M.P.	75 %	
									CHHATISGARH	20 %	
SOUTH (Karnataka,TN,AP&TG,AP, TG, & Kerala), (31 Resv.)	-	-	1	-	-	-	-	30	AP&TG	-72 %	
									A,P	-67 %	
									TG	42 %	
									KARNATAKA	-41 %	
									KERALA	-30 %	
									T.N.	-81 %	
Status of 91 reservoirs	0	1	1	1	3	5	11	69			

4 Basin wise storage position:

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

Close to normal: NIL

Deficient: Indus, Rivers of Kutch, West Flowing Rivers of South and Krishna

Highly deficient: Cauvery & neighbouring EFRS.

- 5 Out of 91 reservoirs, **51** reservoirs reported more than 80% of normal storage & **40** reservoirs reported 80% or below of normal storage. Out of these **40** reservoirs **22** having storage upto 50% of normal storage.

Name of reservoir	%	Name of reservoir	%
SHOLAYAR	0	LOWER BHAWANI	28
NAGARJUNA SAGAR	0	PERIYAR	29
ALMATTI	0	SOMASILA	33
BHADAR	9	KRISHNARAJA SAGRA	40
KABINI	9	PENCH (TOTALADOH)	42
VAIGAI	12	HEMAVATHY	42
PARAMBIKULAM	13	ALIYAR	43
DANTIWADA	15	RAMGANGA	46
METTUR(STANLEY)	16	NARAYANPUR	46
VANIVILAS SAGAR	20	LINGANAMAKKI	50
BHADRA	21		
TUNGABHADRA	23		

18 reservoirs having storage 51% to 80% of normal storage.		
51% to 60%	61% to 70%	71% to 80%
9	6	3

- 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 - BASINWISE

GOVERNMENT OF INDIA

CENTRAL WATER COMMISSION

WEEK ENDING :- 20.04.2017

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	12.229	43.53%	8.076	28.74%	7.462	26.56%	63.88
INDUS	14.730	3.443	23.37%	3.133	21.27%	4.417	29.99%	-22.05
NARMADA	17.414	6.086	34.95%	4.775	27.42%	4.480	25.73%	35.85
TAPI	7.394	3.487	47.16%	1.514	20.48%	2.687	36.34%	29.77
MAHI	4.012	1.715	42.75%	0.921	22.96%	1.446	36.04%	18.60
SABARMATI	0.735	0.217	29.52%	0.191	25.99%	0.172	23.40%	26.16
RIVERS OF KUTCH	0.887	0.061	6.88%	0.264	29.76%	0.127	14.32%	-51.97
GODAVARI	15.394	4.708	30.58%	2.955	19.20%	3.986	25.89%	18.11
KRISHNA	32.831	2.576	7.85%	2.383	7.26%	6.424	19.57%	-59.90
MAHANADI & NEIGHBOURING EFRS	13.181	7.024	53.29%	4.383	33.25%	4.990	37.86%	40.76
CAUVERY & NEIGHBOURING EFRS	8.359	0.703	8.41%	1.778	21.27%	2.559	30.61%	-72.53
WEST FLOWING RIVERS OF SOUTH	14.766	3.771	25.54%	4.140	28.04%	4.745	32.13%	-20.53
TOTAL	157.799	46.020		34.513		43.495		
PERCENTAGE								5.81

WEEKLY REPORT OF 91 IMPORTANT RESERVOIRS OF INDIA

GOVERNMENT OF INDIA

CENTRAL WATER COMMISSION

WEEK ENDING :- 20.04.2017

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	467.08	6.229	0.980	20-04-2017	16	28	27	676	1200
*2	PONG DAM	423.67	397.04	6.157	1.077	20-04-2017	17	14	29	-	360
<u>PUNJAB</u>											
*3	THEIN	527.91	514.36	2.344	1.386	20-04-2017	59	22	40	348	600
<u>RAJASTHAN</u>											
*4	MAHI BAJAJ SAGAR	280.75	269.95	1.711	0.594	20-04-2017	35	21	22	63	140
5	JHAKAM	359.50	346.80	0.132	0.038	20-04-2017	29	8	14	28	-
*6	RANA PRATAP SAGAR	352.81	346.86	1.436	0.420	19-04-2017	29	32	39	229	172
<u>EASTERN REGION</u>											
<u>JHARKHAND</u>											
7	TENUGHAT	269.14	258.96	0.821	0.376	20-04-2017	46	35	34	-	-
8	MAITHON	146.3	144.22	0.471	0.331	20-04-2017	70	16	39	342	-
*9	PANCHET HILL	124.97	123.15	0.184	0.103	20-04-2017	56	11	42	\$	80
10	KONAR	425.81	417.29	0.176	0.051	20-04-2017	29	34	46	\$	-
11	TILAIYA	368.81	365.49	0.142	0.040	20-04-2017	28	19	22	\$	4
<u>ODISHA</u>											
*12	HIRAKUD	192.02	187.16	5.378	2.161	19-04-2017	40	36	36	153	307
*13	BALIMELA	462.08	451.41	2.676	1.106	19-04-2017	41	37	28	-	360
14	SALANADI	82.30	67.39	0.558	0.164	19-04-2017	29	4	25	42	-
*15	RENGALI	123.50	120.50	3.432	2.480	19-04-2017	72	29	31	3	200
*16	MACHKUND(JALPUT)	838.16	828.42	0.893	0.274	19-04-2017	31	45	46	-	115
*17	UPPER KOLAB	858.00	852.27	0.935	0.447	19-04-2017	48	33	30	89	320
*18	UPPER INDRAVATI	642.00	633.51	1.456	0.623	19-04-2017	43	36	30	128	600
<u>WEST BENGAL</u>											
19	MAYURAKSHI	121.31	111.65	0.480	0.113	20-04-2017	24	15	21	227	-
20	KANGSABATI	134.14	125.30	0.914	0.283	20-04-2017	31	20	16	341	-
<u>TRIPURA</u>											
21	GUMTI	93.55	89.05	0.312	0.125	18-04-2017	40	47	12	-	15
<u>WESTERN REGION</u>											
<u>GUJARAT</u>											
*22	UKAI	105.16	98.03	6.615	3.215	20-04-2017	49	22	37	348	300
23	SABARMATI(DHAROI)	189.59	182.93	0.735	0.217	20-04-2017	30	26	23	95	1
*24	KADANA	127.7	123.83	1.472	0.822	20-04-2017	56	28	50	200	120
25	SHETRANJI	55.53	50.07	0.300	0.052	20-04-2017	17	14	15	36	-
26	BHADAR	107.89	99.36	0.188	0.005	20-04-2017	3	100	30	27	-
27	DAMANAGANGA	79.86	70.90	0.502	0.151	20-04-2017	30	25	43	51	1
28	DANTIWADA	184.1	163.28	0.399	0.004	20-04-2017	1	8	7	45	-
29	PANAM	127.41	122.10	0.697	0.261	20-04-2017	37	19	45	36	2
*30	SARDAR SAROVAR	121.92	118.96	1.566	1.069	20-04-2017	68	38	55	2120	1450
31	KARJAN	115.25	101.42	0.523	0.194	20-04-2017	37	24	54	51	3

WEEKLY REPORT OF 91 IMPORTANT RESERVOIRS OF INDIA

GOVERNMENT OF INDIA

CENTRAL WATER COMMISSION

WEEK ENDING :- 20.04.2017

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	459.30	2.171	0.722	20-04-2017	33	0	20	227	-
*33	KOYANA	657.90	635.31	2.652	0.682	19-04-2017	26	24	46	-	1920
34	BHIMA(UJJANI)	496.83	491.54	1.517	0.191	20-04-2017	13	0	20	125	12
35	ISAPUR	441.00	429.75	0.965	0.176	19-04-2017	18	11	34	104	-
36	MULA	552.30	542.55	0.609	0.201	19-04-2017	33	10	30	139	-
37	YELDARI	461.77	450.29	0.809	0.072	20-04-2017	9	0	17	78	-
38	GIRNA	398.07	389.35	0.524	0.176	19-04-2017	34	0	18	79	-
39	KHADAKVASLA	582.47	582.23	0.056	0.053	19-04-2017	95	41	39	78	8
*40	UPPER VAITARNA	603.50	597.15	0.331	0.144	19-04-2017	44	35	46	-	61
41	UPPER TAPI	214.00	210.88	0.255	0.096	19-04-2017	38	16	45	45	-
*42	PENCH (TOTALADOH)	490.00	471.43	1.091	0.127	19-04-2017	12	13	28	127	160
43	UPPER WARDHA	342.50	338.02	0.564	0.234	20-04-2017	41	26	34	70	-
44	BHATSA	142.07	120.41	0.942	0.455	19-04-2017	48	41	44	29.378	15
45	DHOM	747.70	735.85	0.331	0.109	19-04-2017	33	32	33	36.2	2
46	DUDHGANGA	646.00	629.99	0.664	0.238	20-04-2017	36	11	40	2.441	24
47	MANIKDOH (KUKADI)	711.25	687.76	0.288	0.020	19-04-2017	7	7	10	2.2	6
48	BHANDARDARA	744.91	731.35	0.304	0.128	19-04-2017	42	12	37	63.74	46
CENTRAL REGION											
UTTAR PRADESH											
49	MATATILA	308.46	304.50	0.707	0.263	19-04-2017	37	18	44	-	30
*50	RIHAND	268.22	260.39	5.649	2.396	20-04-2017	42	20	19	-	300
UTTRAKHAND											
*51	RAMGANGA	365.30	330.18	2.196	0.351	20-04-2017	16	16	35	1897	198
*52	TEHRI	830.00	756.20	2.615	0.317	20-04-2017	12	3	15	2351	1000
MADHYA PRADESH											
*53	GANDHI SAGAR	399.90	395.10	6.827	3.968	20-04-2017	58	44	24	220	115
54	TAWA	355.40	342.87	1.944	0.466	19-04-2017	24	13	23	247	-
*55	BARGI	422.76	413.80	3.180	1.164	19-04-2017	37	45	31	157	90
*56	BANSAGAR	341.64	336.68	5.166	3.092	20-04-2017	60	40	35	488	425
*57	INDIRA SAGAR	262.13	252.60	9.745	3.052	20-04-2017	31	24	19	2380	1000
58	BARNA	348.55	343.05	0.456	0.141	20-04-2017	31	8	15	546	-
CHHATTIS GARH											
*59	MINIMATA BANGOI	359.66	353.36	3.046	1.894	19-04-2017	62	39	51	-	120
60	MAHANADI	348.70	343.07	0.767	0.325	20-04-2017	42	33	39	319	10
SOUTHERN REGION											
A.P. & TG											
*61	SRISAILAM	269.75	244.18	8.288	0.738	20-04-2017	9	6	16	0	770
*62	NAGARJUNA SAGAR	179.83	154.20	6.841	0.000	20-04-2017	0	0	19	895	810
ANDHRA PRADESH											
63	SOMASILA	100.58	83.52	1.994	0.272	20-04-2017	14	40	41	168	0
TELANGANA											
64	SRIRAMSAGAR	332.54	323.64	2.300	0.444	20-04-2017	19	6	11	411	27
65	LOWER MANAIR	280.42	270.78	0.621	0.154	20-04-2017	25	12	27	199	60

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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
KARNATAKA											
66	KRISHNARAJA SAGRA	752.50	736.99	1.163	0.112	19-04-2017	10	16	24	79	-
*67	TUNGABHADRA	497.74	479.42	3.276	0.051	20-04-2017	2	3	7	529	72
68	GHATAPRABHA	662.95	637.90	1.391	0.155	18-04-2017	11	4	10	317	-
69	BHADRA	657.76	636.36	1.785	0.149	18-04-2017	8	20	40	106	39
70	LINGANAMAKKI	554.43	534.36	4.294	0.595	20-04-2017	14	25	28	-	55
71	NARAYANPUR	492.25	485.68	0.863	0.127	20-04-2017	15	22	32	425	-
72	MALAPRABHA(RENUKA)	633.83	621.04	0.972	0.042	18-04-2017	4	3	8	215	-
73	KABINI(Sancherla Tank)	696.16	685.73	0.444	0.005	19-04-2017	1	8	13	85	-
74	HEMAVATHY	890.63	870.15	0.927	0.047	19-04-2017	5	11	12	265	-
75	HARANGI	871.42	855.54	0.220	0.034	19-04-2017	15	7	14	53	-
76	SUPA	564.00	535.16	4.120	1.423	20-04-2017	35	25	30	-	-
77	VANIVILAS SAGAR	652.28	632.53	0.802	0.021	20-04-2017	3	7	13	123	-
*78	ALMATTI	519.60	504.51	3.105	0.000	20-04-2017	0	7	9	@	290
*79	GERUSOPPA	55.00	51.98	0.130	0.113	20-04-2017	87	72	83	83	240
KERALA											
80	KALLADA(PARAPPAR)	115.82	92.25	0.507	0.098	19-04-2017	19	59	36	62	-
*81	IDAMALAYAR	169.00	139.46	1.018	0.299	19-04-2017	29	26	31	33	75
*82	IDUKKI	732.43	705.78	1.460	0.292	19-04-2017	20	29	32	-	780
*83	KAKKI	981.46	952.73	0.447	0.127	19-04-2017	28	43	40	23	300
*84	PERIYAR	867.41	859.10	0.173	0.012	19-04-2017	7	8	24	84	140
85	MALAPMUZHA	115.06	101.74	0.224	0.025	20-04-2017	11	10	22	21	3
TAMIL NADU											
86	LOWER BHAWANI	278.89	260.56	0.792	0.069	19-04-2017	9	5	31	105	8
*87	METTUR(STANLEY)	240.79	211.79	2.647	0.159	19-04-2017	6	22	37	122	360
88	VAIGAI	279.20	264.75	0.172	0.005	19-04-2017	3	11	24	61	6
89	PARAMBIKULAM	556.26	535.73	0.380	0.017	19-04-2017	4	16	34	101	-
90	ALIYAR	320.04	306.63	0.095	0.020	19-04-2017	21	16	49	#	60
*91	SHOLAYAR	1002.79	956.42	0.143	0.000	19-04-2017	0	0	3	-	95
TOTAL FOR 91 RESERVOIRS				157.799	46.020						
PERCENTAGE							29	22	28		

Sd/-

* HYDEL POWER CAPACITY HAVING CAPACITY MORE THAN 60MW

Director

\$ TOTAL CCA 342 TH. HA OF DVC SYSTEM

W. M. , CWC

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